

IN THE CLAIMS:

1. A surface-mountable device comprising:

- (a) a first chip comprising lower and upper electrical contacts;
- (b) a second chip comprising lower and upper electrical contacts;
- (c) a first lead frame portion comprising a header region and a lead region,

wherein the lower contact of the first chip is in electrical and mechanical connection with the header region of the first lead frame portion;

(d) a second lead frame portion comprising a header region and a lead region, wherein the lower contact of the second chip is in electrical and mechanical connection the header region of the second lead frame portion;

(e) a conductive member disposed between and in electrical and mechanical connection with the upper electrical contact of the first chip and the upper electrical contact of the second chip; and

(f) packaging material encapsulating at least a portion of (i) each of the first and second chips, (ii) the header regions of the first and second lead frame portions, and (iii) the conductive member,

wherein the lead regions of the first and second lead frame portions extend from said packaging material and are adapted to allow the device to be surface-mounted with another electrical component, and wherein the first and second chips are not stacked upon each other within the packaged device.

2. The surface-mountable device of claim 1, wherein the header regions of the first and second lead frame portions do not overlap one another within the device.

3. The surface-mountable device of claim 1, wherein the header regions of the first and second lead frame portions are substantially coplanar within the device.

4. The surface-mountable device of claim 1, wherein the first and second lead frame portions each comprises detachment regions, which correspond to locations of separation from a precursor lead frame.

5. The surface-mountable device of claim 1, wherein the conductive member is a wire.
6. The surface-mountable device of claim 1, wherein the conductive member is a conductive sheet.
7. The surface-mountable device of claim 1, wherein a plurality of conductive members are disposed between and in electrical and mechanical connection with the upper electrical contact of the first chip and the upper electrical contact of the second chip.
8. The surface-mountable device of claim 1, wherein the first and second chips correspond to diodes.
9. The surface-mountable device of claim 8, wherein the diodes are rectifier diodes.
10. The surface-mountable device of claim 8, wherein the diodes are avalanche breakdown diodes.
11. The surface-mountable device of claim 1, wherein the first chip corresponds to an avalanche breakdown diode and wherein the second chip corresponds to a rectifier diode having a lower capacitance than the avalanche breakdown diode.
12. The surface-mountable device of claim 1, wherein the first chip corresponds to a thyristor surge suppressor and wherein the second chip corresponds to a rectifier diode having a lower capacitance than the thyristor surge suppressor.
13. The surface-mountable device of claim 1, further comprising a third chip that comprises lower and upper electrical contacts, wherein the lower contact of the third chip is in electrical and mechanical connection with the header region of the second lead frame portion, and wherein the upper contact of the third chip is in electrical and

mechanical connection with said conductive member or a separate conductive member.

14. The surface-mountable device of claim 13, wherein a plurality of conductive members are disposed between and in electrical and mechanical connection with the upper electrical contact of the first chip, the upper electrical contact of the second chip, and the upper electrical contact of the third chip, such that the upper electrical contacts of the first, second and third chips are shorted together.
15. The surface-mountable device of claim 13, wherein the first chip corresponds to a bidirectional avalanche breakdown diode and wherein the second and third chips correspond to rectifier diodes having lower capacitance than the bidirectional avalanche breakdown diode.
16. The surface-mountable device of claim 13, wherein the first chip corresponds to a bidirectional thyristor surge suppressor and wherein the second and third chips correspond to rectifier diodes having lower capacitance than the bidirectional thyristor surge suppressor.
17. The surface-mountable device of claim 13, wherein said conductive member is a conductive sheet.
18. The surface-mountable device of claim 13, wherein the lower and upper electrical contacts are on opposing surfaces of the first, second and third chips.
19. The surface-mountable device of claim 13, wherein said device is a TVS device.
20. The surface-mountable device of claim 13, wherein said device is a low-capacitance, high-voltage TVS device.

21. The surface-mountable device of claim 1, wherein the lower and upper electrical contacts are on opposing surfaces of the first and second chips.
22. The surface-mountable device of claim 1, wherein said device is a TVS device.
23. The surface-mountable device of claim 1, wherein said device is a low-capacitance, high-voltage TVS device.
24. The surface-mountable device of claim 1, wherein two or more chips are in electrical and mechanical connection with the header region of the first lead frame portion, wherein two or more chips are in electrical and mechanical connection with the header region of the second lead frame portion, and wherein the conductive member is in electrical and mechanical connection with each chip.
25. A method of manufacturing the surface-mountable device of claim 1, comprising:
  - (a) providing a precursor lead frame comprising said first lead frame portion, said second lead frame portion, and a severable portion;
  - (b) placing said lower contact of said first chip in electrical and mechanical connection with the header region of the first lead frame portion and placing said lower contact of said second chip in electrical and mechanical connection with the header region of the second lead frame portion;
  - (c) placing said conductive member in electrical and mechanical connection with the upper electrical contact of the first chip and the upper electrical contact of the second chip;
  - (d) encapsulating at least a portion of (i) the first and second chips, (ii) the header regions of the first and second lead frame portions, and (iii) the conductive member in said packaging material; and
  - (e) separating the first and second lead frame portions from the severable portion of the precursor lead frame.